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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,717	10/06/2003	Ira Mark Smith	SMITH-I.UTL	2891

21590 7590 05/20/2005  
GREG O'BRADOVICH, P.C.  
295 CULVER STREET  
SUITE A  
LAWERENCEVILLE, GA 30045

EXAMINER
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DOSTER GREENE, DINNATIA JO

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/679,717

Applicant(s)

SMITH ET AL.

Examiner

Dinnatia Doster-Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11 and 13-27 is/are pending in the application.  
4a) Of the above claim(s) 15-25 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 4-8, 11 and 26-27 is/are rejected.  
7) ☒ Claim(s) 2, 3, 13 and 14 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☒ Other: Detail Action.

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## DETAILED ACTION

### *Response to Amendment*

The amendment filed February 18, 2005 has been received and made of record in the application. As requested, the amendment of claims 1-3, the cancellation of claims 9-10 and 12, the withdrawal of claims 15-25 with traverse, and the addition of claims 26 and 27 have been entered.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4, 5, 6, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (U.S. Patent No. 6125636) in view of Altura (U.S. Patent No. 6,613,953) or Haas (U.S. Patent No. 6,074,414). As previously discussed in the Office Action mailed on November 16, 2004, Taylor discloses the claimed invention. However, in view of the Applicant's amendments, Taylor

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fails to disclose wherein one of the thermally conductive sheets is positioned adjacent an inner surface of the orthopaedic brace such that the other thermally conductive sheet is positioned adjacent a user's skin surface when the brace is donned. However, Altura and Haas, which also disclose thermally conductive sheets, both relate to positioning a thermally conductive sheet directly adjacent a user's skin. Altura teaches that a thermally conductive layer 23 is positioned in direct contact with the person's skin 15 so that heat from healthy skin areas flows into the thermally conductive layer 23 so as to maintain wound 26 at a normal core temperature of 37°C (Altura, col. 7, lines 19-51 and Figs. 1 and 3). Haas also teaches that it is known to place thermally conductive sheets (4, 5) directly upon a person's skin for medical use to modify the body's temperature for therapeutic treatment (Haas, Abstract, col. 5, line 57- col. 6, line 23). Furthermore, Figure 8 of Haas specifically teaches that a thermally conductive sheet 86 may be utilized within a neck brace such as Taylor and placed directly upon the user's skin. Thus, it would have been obvious to one skilled in the art to modify the thermally conductive heating device of Taylor to be placed directly upon the user's skin as taught by either Altura or Haas for the purpose of enhancing the device's therapeutic effect.

Claims 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brink (U.S. Patent No. 5,741,220) in view of Brunswick (U.S. Patent No. 4,716,892) and Dvoretzky et al. (U.S. Patent No. 5,534,021). As to claims 7-8, Brink discloses an orthopaedic brace having a main body with an

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outer and inner surface. The brace also comprises a plurality of straps, fasteners and buckles. Although the brace of Brink does not disclose the exact configuration as recited in the claims, the Office takes Official Notice that the number of primary and secondary straps that may be employed in an orthopaedic brace is a matter of design choice which can depend entirely upon the body part which is being wrapped. Furthermore, a review of the specification did not reveal any criticality to the configuration of the straps and buckles. Thus, the design configuration of the brace recited in the claims would have been obvious to one skilled in the art in view of the brace disclosed in Brink.

However, Brink fails to disclose an opening and a temperature pad located within a pocket, wherein the temperature pad maintains at least one of a heat level or a cold level for therapeutic orthopaedic treatment. Brunswick, which relates to a knee supporting device like Brink, discloses that it is known to design a knee brace having an opening for the patella. Dvoretzky, which relates to a heating pad for providing therapy, teaches that it is known in the art to insert a heating pad 22 within a cutout zone 32 wherein the heating pad 22. Due to the delivery system of the heating pad 22, the temperature of a user's skin is elevated and "maintained" at about 42°-43° C for a period of about two or more (Dvoretzky, col. 4, lines 36-43). Thus, it would have been obvious to incorporate the opening of Brunswick for the purpose of providing the patella mobility and to insert the heating pad 22 of Dvoretzky into the pocket 34 of Brink for the purpose of maintaining a constant temperature applied to the injured area for an extended amount of time.

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As to claims 11, Brink also discloses a orthopaedic brace including a pouch or pocket 34, discloses that the pocket contains a mesh front panel 36.

***Allowable Subject Matter***

Claims 2, 3, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

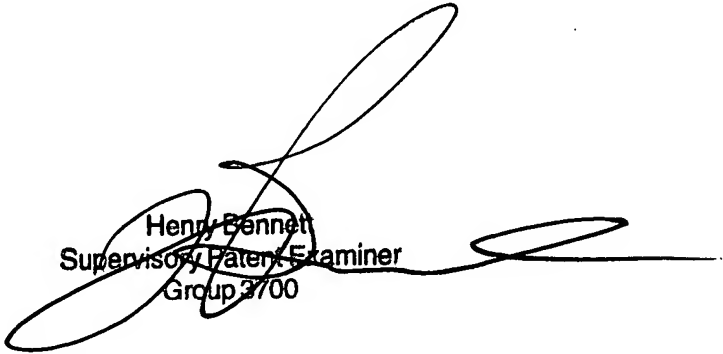
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinnatia Doster-Greene whose telephone number is 571-272-7143. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ddg



Henry Bennett  
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Group 3700